**Conclusion**

IPRO teams in the future can continue investigating new solutions to the problems we have identified, as well as identify new problems. We were not able to research every idea we had or identify every problem present. There is more work to be done to help the formulation process at Land O’ Frost.

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Objectives

♦ Identify all inputs, outputs, assets, & process parameters
♦ Map production process
♦ Observe activities and workings
♦ Identify bottlenecks
♦ Evaluate performance
♦ Suggest improvements to formulation

Our approach

The IPRO team tackled the problems Land O’ Frost is facing through collaboration with experts from different fields such as electrical and mechanical engineering. The first approach to analyzing the problem was observation. Pictures and videos of the process were taken for close inspection by the IPRO team. Some of the problems were solved through careful observation of the process. The IPRO team visited the plant three times. In addition, the IPRO team communicated via conference calls and emails to better understand how the company operates.

Recommendations

Our team has taken time to understand the formulation process at Land O’ Frost. Through conversations and research, we have been able to compile many suggestions to improve the process. Some of these are not feasible or have been previously tried without success and been rejected. Others have already been considered and are in the process of being implemented. Our final suggestions to the company are as follows:

♦ Install an electric eye device, like in garage doors, to respond when materials are placed too close to the wall.
♦ Explore the capabilities of magnets more thoroughly to resolve the issue concerning closures that hold the logs of deli meat together
♦ Using fewer tools in the plant. Every tool should be welded. Policies concerning tools should be implemented requiring tools be examined before they are used, tool breakages should be tracked, and tools should be discarded preventatively according to these records.
♦ Use a cleaning device, wrapping process, or cover to better monitor the material when it is being dumped into the grinding machine.
♦ Create a quiz to ensure workers understand the information presented to them in training.
♦ Create a new system for scheduling, such as a computer program.
♦ Use a computerized tracking system when arranging the curing room.
♦ Replace outdated equipment. Including purchasing new machines that are faster, as well as searching for automated alternatives.
♦ Revise the plant layout by organizing according to product or line rather than process.
♦ Measure efficiency based on equipment capacity rather than man hour potential.